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ORIGINAL COMMUNICATIONS.

FETID CORYZA.

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THE term *fetid coryza* appears to me better adapted than *ozæna* to designate the condition under consideration, though merely indicating a combination of characteristic symptoms—*discharge and odor*—attending disease involving the nasal passages, without defining its nature.

Fetid coryza is produced by various affections. It may be due to ulceration of the mucous membrane of the nasal passages or of the sinuses communicating with them, whether erythematous, catarrhal, glandulous, scrofulous, syphilitic, lupoid, or cancerous. It may be due to destructive disease of the bones or cartilages of the nasal organs, or of their periosteum or perichondrium; whether the disease be idiopathic, traumatic, or specific. It may be due to the development of adventitious growths in the nasal structures themselves, or in others contiguous to them. It may be due to the deposition of calcareous matters from the secretions, and their aggregation into rhinoliths or nasal calculi. It may be due to the retention of some external foreign body, introduced by design or accident, and to the inflammatory processes resulting therefrom. It may be due to some unfortunate individual or family idiosyncrasy without any ulceration whatever, and even with little inflammation or none at all. It may be due simply to retention of nasal excreta and their decomposition *in situ*.

We have, therefore, to interrogate the part and the system in order to make a satisfactory diagnosis as to the cause of the discharge in any given case, and to form a judgment as to the proper method of treatment.

In order to examine the parts they must be washed out as thoroughly as possible by the use of the nasal douche, and syringes introduced anteriorly and posteriorly into the nasal passages; the best substance in general being tepid water impregnated with table-salt—a drachm to the pint. If this fails to detach the secretions, the phosphates of ammonia and soda or the carbonates of soda and potassa may prove more efficient in like proportion. Sometimes the forceps or the sponge-mop may be used to detach matters within their reach. In order to make a thorough examination of the parts, it is necessary that they be thoroughly cleansed. After the parts have been cleansed they can be examined before a strong light,—anteriorly by drawing the alæ aside so as to dilate the passage, or by introducing a speculum; and posteriorly with the rhinoscope. In this way we observe the appearance and condition of the mucous membrane, detect swelling, ulceration, retained secretions, foreign bodies, and morbid growths, exposed cartilage or bone, etc. The tortuous contour of the turbinated bones and nasal meatuses renders it impossible to examine these structures in their entire extent; but still, under a good light, they can be explored pretty thoroughly, especially with the aid of probes bent so as to admit of application to the surfaces of the various parts, on the same principle employed by the dentist in exploring the tortuous recesses in a carious tooth. Rhinoscopic inspection enables us to examine, in addition, the condition of the glandular tissue at the roof of the pharynx, a structure very frequently implicated in diseases giving rise to the discharge under consideration.

In some cases of fetid catarrh, the bones and cartilages of the nose, as far as their condition can be examined, appear healthy; and no ulceration of the mucous membrane can be detected on inspection anteriorly or posteriorly. There seems to be some constitutional idiosyncrasy in these cases, in consequence of which, retained portions of the nasal secretions undergo desiccation, and remain impacted in some portion of the sinuosities of the nasal passages; there undergoing decomposition. This condition of system has been compared to that which is attended by the peculiar, offensive smell of the cutaneous perspiration from the feet and armpits of certain individuals who cannot rid themselves of their unpleasant odor even by the most scrupulous ablution. In these idiosyncratic cases the discharge is by no means profuse, unless in exceptional instances. Sometimes, indeed, it is quite scanty; but it manifests a disposition to become desiccated into thin scales or crusts, removable only with more or less difficulty: sometimes by way of the nostrils anteriorly, and sometimes by a sort of inspiratory nasal screatus, which, after repeated efforts, forces them through the posterior nasal outlets into the pharynx, whence they are expectorated. These crusts usually emit a horrible stench, perceptible at a distance of several feet, and capable of impregnating a large room with their fetor.

All that can be effectually accomplished in the way of treatment in these cases, seems to be the promotion and maintenance of an active condition of the secretory functions of the skin and kidneys by frequent bathing and copious water-drinking,—keeping up a sort of sewerage, as it were,—and the thorough and efficient cleansing of the parts several times a day, especially at night and morning; making this act a constituent and essential part of the daily toilet, as much so as the use of the tooth-brush or the wash-basin. For this purpose the nasal douche of Thudichum, or some modification of it, is the best contrivance in most instances; but if the crusts are hard to remove, the use of the pharyngeal nasal syringe and of the continuous rubber hand-bellows syringe will afford better results; the latter especially in those cases in which crusts moulded to the contour of the posterior nasal outlet are apt to accumulate, and to dislodge which, readily, a stream of fluid entering with some force from the front is requisite. The ordinary solution of table-salt—a drachm or two to the pint of

tepid water—fulfils the requirements of the douche for cleansing-purposes; and detachment of the crusts is facilitated by the substitution or addition, as may prove most appropriate, of equal quantities of alkalines, such as the carbonate or bicarbonate of soda, phosphate of soda, and the like. At least a quart of the cleansing solution should course through the nasal tract at each night and morning ablution; part of it started through one nostril, and the remainder through the other. After the parts have been cleansed, the douche should again be used, containing a disinfectant in tepid solution. Permanganate of potassa, chlorinated soda, carbolic acid, and so on, employed in this manner, will, in great measure, control the fetid odor of the secretions.

Various local applications are made at times for the purpose of altering the nutrition of the mucous membrane, in the secretion of the glands of which, the diseased action is supposed to reside. For this purpose various preparations of mercury and of iodine, the terebinthinates, muriate of ammonia, etc., have been employed in the forms of ointment, powder, solution, and vapor; but, at least in the hands of the writer, they have proved of only questionable benefit.

Local cleansing, with disinfectant detergent douches immediately afterwards, and the maintenance of the cutaneous and urinary secretions by appropriate remedies, have rendered good service; but, to be efficient, resort to these measures must be constant.

Fortunately, in this variety of fetid coryza, the affection, whatever its real nature, moderates in severity as the patient becomes older, so that by middle adult life it has subsided entirely, or in great measure. It is a long while to await permanent relief, to be sure, but it is better than no prospect of cure.

Another form of fetid coryza, attended with certain local manifestations to be described farther on, is engrafted upon the strumous diathesis; and this variety, from its persistence, and from its ultimate destructive results,—which, when very extensive and insufficiently attended to, resemble so much the effects of analogous conditions in constitutional syphilis,—seems to contribute some force to the doctrine that scrofula is but an inheritance of syphilis; modified, it is true, but bearing a relation to that virus similar to that which some authors trace between varicella and variola.

These cases usually originate in an acute coryza or catarrh, the result of exposure to cold. This catarrh gradually becomes chronic, the attendant discharge more or less profuse, varying in color and consistence, being at one time muco-purulent, at another purulent, sometimes sanguinolent, and so on. The odor of the discharge is exceedingly offensive, and there is a permanently unpleasant odor of the patient's breath, rendering propinquity to the individual very disagreeable.

In these cases crusts of inspissated mucus accumulate at the outlets of the posterior nares from detention there of the secretions, and they often become moulded to the form of the opening, presenting, when discharged, a peculiar honeycomb-like configuration. These moulds are usually several days concreting, and become discharged perhaps once or twice a week, sometimes oftener, sometimes less frequently. When discharged at long intervals, small, dense clumps of irregular conformation, and of similar constituents, will be occasionally drawn into the throat by forced nasal inspiration, and be then expectorated. These will possess the characteristic odor. Sometimes small caseous-like concretions will be hawked down, apparently from the glandular tissue at the nasal portion of the roof of the pharynx, similar in appearance to the analogous matters sometimes discharged from the tonsils, and, like them, of an intolerable stench when crushed. In some instances, desiccated crusts can be seen upon the glandular masses at the roof of the pharynx, on pharyngo-rhinoscopic inspection. When examined immediately after spontaneous or artificial removal of the crusts, this glandular tissue is seen to be spongy, and, if the removal has been forcible, is most likely to bear decided evidence of hemorrhage. Pain will be complained of in the parts and will be referred especially to the region of the frontal sinuses.

This form of disease of the nasal passages is met with in all classes of society: in the robust individual no less than in the delicate one; in those who have been tenderly reared, and in those who have been brought up in the roughest manner. It may make its appearance at any age, but seems to be most frequently noticed for the first time about the period of the second dentition. Most of the patients I have seen have been girls from six or eight years of age upwards to confirmed puberty or early adult life.

If, after thorough cleansing with the douche, syringe, or forceps, the parts are carefully examined,—anteriorly by the aid of hook, probe, dilator, or speculum, and posteriorly by the rhinoscopic mirror,—some points of ulceration, superficial or deep-seated, will usually be detected upon the mucous membrane. These ulcerated spots may occupy the free surface of the turbinated bones, or the lower region of the septum; and even when ulceration cannot be discovered in these situations it is often fair to infer that it is likely to exist upon some portions of the turbinated bones altogether out of the field of direct or indirect vision. The nasal mucous membrane will be swollen, often to such a degree as to occlude the passage at one or more points; in some instances the result of sero-fibrinous or fibrinous infiltration into the submucous connective tissue; in others, the result, in addition, of actual hypertrophy of this tissue. In some cases little bags of thickened tissue or exuberant folds project from the walls and are sometimes mistaken for neoplasms. The parts are usually very much congested, though they do not bleed as a rule, except upon rough manipulation; and they are very sensitive to contact with the probe in some instances, and not at all so in others. The mucous membrane of the posterior portion of the septum is often seen by the rhinoscope, pushed off from its sides by submucous infiltration, bulging into the free space of the nasal

outlets so as to present much the appearance of turbid morbid growths.

As a matter of course, in this condition, the patient will experience more or less difficulty of nasal respiration; one nostril or the other, in many instances, being impervious to air, nearly all the time. This induces a habit of keeping the teeth slightly apart to facilitate breathing, and favors the formation of chronic pharyngitis; a condition which is often coincident to all the affections under consideration.

If the disease has existed for a number of years —and it is essentially chronic—the ulcerations will have extended beyond the limits of the tissue proper of the mucous membrane, and will have involved the cartilages and the bones, portions of which will sometimes have been destroyed, and have been discharged spontaneously; so that the cartilaginous septum is in many instances found to have been pierced through, sometimes in one or two small perforations, but more frequently in a single large, irregular hole, perhaps admitting the end of the little finger, or the end of a larger one, and looking as if it had been gouged out with some rude tool. In some instances, one or more of the turbinated bones, usually the middle one, will be necrosed and bare in its entire extent, or the greater portion of it, awaiting its extraction,—an operation readily accomplished with polyp-forceps. Sometimes it has been removed spontaneously, or has been pulled out by the patient, leaving a large, free space in the nostril, through which the posterior wall of the pharynx can be seen, or a portion of the upper surface of the velum. In some instances the destructive inflammation will have progressed to a farther extent, and have involved portions of the superior maxillary bone, from which copious accumulations of fetid pus and necrotic particles will have been discharged at intervals. Cases of this kind will have produced some alteration in the external configuration of the parts, the nose being sunk in or flattened out, and the nostrils distended. In some instances the orifices of one or more sinuses will be recognized, the tracks of which cannot be readily traced, perhaps because they course around the scroll of the turbinated bone. From these openings, on pressure behind them with a probe, a few drops of creamy pus can often be discharged.

Some other evidence of the strumous diathesis is usually apparent.

In cases of undoubted syphilitic origin,—and the distinction between scrofulous and syphilitic coryza is not always well marked,—the involvement of bony structures will progress to a much greater extent than has already been described, the earlier manifestations having been similar to those of catarrhal and scrofulous inflammation, but more active. The turbinated bones, the vomer, the nasal bones, the palate bones, the lachrymal bones, the sphenoid, and the ethmoid, will often undergo more or less destruction. In some instances pharyngeal rhinoscopy and the use of the probe will early reveal necrosis of the vomer, the sphenoid, and the basilar process of the occipital bone. The discharge in these cases is not, as a rule, so offensive in odor as in the scrofulous cases; but it is equally persistent, and will continue as long as any dead bone remains undischarged. The tortuous contour of the nasal passages and the sinuses leading to them is such as to render it impossible in many instances to remove all of this dead bone by surgical interference through the nostrils anteriorly or posteriorly; so that its discharge must be awaited bit by bit. The amount of destruction that the parts may undergo under such circumstances is enormous. In some instances the cranial vault has been pierced, and the resulting meningitis has put an end to the complaint and to the patient.

The amount of the discharge, its consistence, and the intensity of its disagreeable odor, will vary during the course of a fetid coryza, whatever may have been its origin. An inflammation of the parts such as follows a cold, a determination of blood to the head, over-work, the approach of the menstrual flux, all seem to increase the offensiveness of the discharge. This will become moderated after cleansing with the douche, and the application of remedies; but will wax just as bad as ever in a few hours, or a few days. When there is an involvement of bone, or a fresh involvement of bone, the fetor will be increased until the necrosed portion has become exfoliated and discharged.

The patient is usually cognizant of his extremely unpleasant condition to a certain extent, but is unaware of the full amount of stench emitted from his body, because the sense of smell is obtunded, and in some instances entirely destroyed. With the loss of smell there is, in consequence, more or less loss of the sense of taste; so much of it as is dependent on the sense of smell. In those cases in which the frontal and maxillary sinuses are affected to a greater extent than the nasal passages, the patient is better able to appreciate his infirmity, for the sense of smell is still conserved to a considerable degree. The offensiveness of the odor in extreme cases is beyond description, and must be felt to be comprehended. It will impregnate a room for hours, and deter the practitioner from persisting in proper efforts to relieve the local condition.

(To be continued.)

A CASE OF EXTRA-UTERINE PREGNANCY.

BY GEORGE STILES, M.D.,

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I WAS called, on the evening of September 4, 1870, to see Mrs. V., aged 31 years, mother of one child, which was born when she was 21 years of age. She complained of an acute pain, of a pulsating or throbbing character, in the right lower part of abdomen. Her menses, which should have appeared on the 31st of August, had not taken place; and she had been suffering from vague abdominal pains for some three weeks previously. Upon inquiry, I ascertained that she was experiencing morning-sickness, and that her mammæ afforded the usual rational signs of commencing pregnancy. From conversation with herself and husband, and

from the evidences of these signs, I concluded that she was about one month gone in pregnancy. I administered the ordinary remedies to relieve her pain and nausea, but with very partial effect; and from that time I was compelled to visit her two or more times daily, in consequence of her very great and continued suffering; to relieve which it was absolutely necessary to employ anodynes in various doses and of various kinds, such as morphia hypodermically, with morphia, opium, hyoscyamus, belladonna, and various other narcotics and anodynes, both by stomach and rectum.

On the morning of the 1st of December I was sent for, and informed that she was threatened with a miscarriage. On examination, I found the mouth of the uterus closed, but that blood was escaping freely from its cavity; her pulse was 126; the abdomen tympanitic; extremities cold; her face ghastly pale; no nausea. Concluding that all hope of saving the ovum was gone, I gave a full dose of fluid extract of ergot, and in a few hours the hemorrhage entirely ceased. In a few hours later, however, she was seized with intense pain in the abdomen, uncontrollable vomiting, and all the symptoms of acute and violent peritonitis. Pulse 120; her abdomen enormously swollen, and sensitive to touch; constant vomiting; bowels obstinately constipated; the bladder had to be emptied by the use of the catheter. So grave were the symptoms that I thought she would die. The main treatment consisted in giving enormous doses of opium by the rectum, and the application of ice to the abdomen. At the end of three days she was decidedly better; pulse diminished in frequency; stomach retained small quantities of suitable food; bladder acted spontaneously, and the bowels were finally moved (after repeated failures by other purgatives) by a dose of oleum tiglii. Five days later, all the symptoms returning with all their original severity, Dr. Hiram Corson was called in consultation, who, after a careful examination finding the uterus in its normal position, but somewhat enlarged, and detecting no other local signs of pregnancy, expressed it as his belief, from the history of the case, that she was pregnant, but that her sufferings came more from a highly hysterical condition than from anything else; and suggested the disuse of anodynes, and the substitution of quinia, three times daily, with ice applied externally to the abdomen. This treatment was continued for two or three days, when the pain in her abdomen became so excessive that it was absolutely necessary to return to larger doses of anodynes than ever, with the aid of which it was with great difficulty that sleep could be produced, or any relief could be obtained.

For the next three weeks her symptoms were of the gravest and most urgent character. Abdominal pain intense, only relieved imperfectly by enormous doses of anodynes; her nausea so unremitting that life could only be sustained by milk and beef-essence, administered by rectum; her pulse feeble, and always over 100; belly tympanitic and excessively tender; the bowels constipated.

In the month of January, 1871, I made the following notes of the case:

January 6.—Mrs. V. spent a terrible night, but this morning is somewhat easier; has slept nearly all day.

January 8.—Passed a better night. Bowels spontaneously moved this morning; pulse 110; skin moist and quite cool; complains of nausea after taking food.

January 12.—Much better this morning than for a long while. Bowels moved daily since the 8th inst.; takes food kindly; pulse 100.

January 26.—Up to this time Mrs. V. has been steadily improving; to-day sat up in her room for four consecutive hours; eats heartily; daily evacuations from bowels; sleeps well at night; pulse 90.

January 29.—Mrs. V. came down-stairs yesterday for the first time; thinks she is able to look after her household duties; a good appetite; functions apparently all normal. From this time I discontinued my visits.

On the 6th of February she visited an uncle in Philadelphia, and appeared in good health.

On the 7th I was called to see her. She had reached her home in great suffering, and from this time her symptoms became very grave; the abdomen was as much enlarged as is usual at the end of the eighth month of gestation, and exceedingly sensitive to the touch. Her pulse remained at about 120; her nausea was constant, and all food was almost instantly vomited; her abdominal pain was so severe that the largest doses of anodynes gave but little relief,—the usual quantity being as much as nine grains of opium in twenty-four hours, or one and a half grains of morphia.

As she was becoming exceedingly emaciated, I began to entertain grave doubts of a normal pregnancy; and on the 26th of March, 1871, I called in consultation Professor Penrose, of the University of Pennsylvania. She then presented the following appearance and condition: Face pale and haggard; mind somewhat disposed to wander; pulse 120, and feeble; hands cold; abdomen very much distended, and so sensitive that it was a matter of discussion whether she should not be etherized, so that a more thorough exploration could be made. Palpating the abdomen, a tumor was easily recognized, about the size of the uterus at the beginning of the eighth month of pregnancy, and in the median line, while above and on either side of the tumor the sound of percussion was very tympanitic. This tumor was firmer and harder than the pregnant uterus, and appeared of uniform consistence.

A vaginal examination revealed the mouth of the uterus carried close against the symphysis pubis; the cervix somewhat softened, and admitting the index-finger an inch. From the posterior lip of the uterus, and directly continuous with it, could be traced a firm, hard tumor, which filled the whole of the upper part of the pelvic cavity, and seemed to be part of the abdominal tumor dipping into the pelvis. This mass was as firm and hard as a fibroid growth, and *ballottement* could detect no movable body in or above it. A most careful exploration of the abdomen revealed no sound of fœtal heart or of fœtal movements.

Dr. Penrose considered the case a very obscure one. That the enlargement was not caused by a natural pregnancy he considered almost certain, in

consequence of the density of the tumor, the absence of the fœtal heart-sounds, as well as of the signs furnished by the active and passive movements of the child; and, besides all these, the very singular position of the os uteri, close to the symphysis pubis, is never met with in normal gestation. But then, on the other hand, there had been menstrual suppression for seven months, while in the beginning of the case there had been morning-sickness and the early mammary alteration characteristic of pregnancy; and now here was an abdominal tumor in the position and of the size usual at or about the end of seven months.

Dr. Penrose suggested the probability of an extra-uterine pregnancy, and referred to a case the history of which had been recently sent him from North Carolina, in which some of the conditions, especially the very singular one of the position of the os uteri, resembled those furnished in the present instance; but in this case the fœtal heart-sounds and fœtal movements could be distinctly recognized, while here there were no heart-sounds, no fœtal movements.

Dr. Penrose thought that there might be some growth—possibly malignant—which had caused the rapid enlargement and terrible suffering. He had no hesitation, however, in giving his opinion that, as the case was so obscure, it was barely possible that pregnancy might exist, and hence no active interference ought to be attempted until after the full period of gestation, and the only treatment to be pursued was that which she had been receiving —viz., rest, anodynes, nourishment. When the patient's husband requested the Professor's prognosis, he said that he considered the woman so ill that he believed she would die before the full period of gestation was reached, and requested, should death take place as he expected, that a post-mortem examination should be made. Ten days later some relatives of the family requested that Dr. Washington Atlee, of Philadelphia, should be called to see her. After a hurried examination, Dr. Atlee expressed it as his opinion that she was either pregnant or suffering from ovarian tumor; that the pain in the abdomen was hysterical; that she was not so seriously ill as Professor Penrose stated, but that she would certainly live for some months, and probably get well. He differed from Professor Penrose as to treatment, recommending exercise, abstinence from anodynes, and that her mind should be educated to look upon her sufferings as the result of a hysterical fancy. From this time until her death, which occurred three days after Dr. Atlee's visit, her symptoms increased in severity; she became constantly delirious, with vomiting, and uncontrollable pain. Forty-eight hours before death, suddenly, copious evacuations of altered blood with traces of pus were passed from the rectum, amounting in quantity by measure to one-half a gallon; and from this time she rapidly sank, dying on the morning of the 7th of April, 1871. On the evening of the 8th of April, a post-mortem examination was made by Professor Penrose and myself. On cutting through the abdominal walls it was found that the whole peritoneal cavity had been entirely obliterated by universal peritonitis, which peritonitis had evidently lasted for a long time,—doubtless since the attack in December previous. So firm were these peritoneal adhesions that the knife could be used only with great care, and the contents of the abdominal cavity had to be separated from the walls by tearing with the fingers. After some time the whole mass of abdominal contents was removed, and not until then was the nature of the enlargement recognized. The case had been one of extra-uterine pregnancy; the cyst had ruptured and had discharged its contents into the peritoneal cavity months previous to death,—doubtless at the time of the sudden hemorrhage and acute peritonitis in December. The dead fœtus, about four months old, thoroughly softened and macerated, was found surrounded by coagulated blood with some pus, and the whole encysted in a cavity, the walls of which were formed by the hardened and thickened adjacent surfaces. The relative positions of the various component parts of this mysterious abdominal growth were as follows. In front was the uterus, enlarged, as will be seen by the description, its cavity empty. Behind the uterus, and forming the hard fibrous projection into the pelvic cavity which had seemed to the touch, before death, to be part of the posterior uterine wall and to be continuous with the posterior lip of the uterus, was an oval mass of solidified blood, appearing, after removal from its position, as large as, and somewhat the shape of, an ostrich egg. Above this hard oval mass of solidified blood was the body of the fœtus, its head directed towards the posterior part of the right iliac fossa, the breech to the left iliac fossa, while above and around the fœtus were coagulated blood and pus.

This mass of abnormal structures was carefully removed, and sent by Professor Penrose to Dr. W. F. Jenks, an eminent accoucheur of Philadelphia, for a microscopical examination, with the following result:

The bladder was contracted. An incision which was made with the intention of dividing the anterior wall of the uterus, opened a cavity about the size of an orange, the anterior wall of which was formed by the abdominal walls and the fundus of the bladder, while the enlarged uterus and right broad ligament formed the posterior boundary. This sac communicated by ragged ulcerated openings with a cavity which subsequently proved to be the distended right Fallopian tube. The lower portion of the peritoneum, which formed the lining membrane, was discolored by old hemorrhagic effusions. The contents had mostly escaped; there remained, however, a small amount of a dark, opaque, brownish fluid.

The uterus was six inches in length, three inches in breadth, its walls three-fourths of an inch in thickness. The mucous membrane was thickened and injected. It was impossible to trace the left Fallopian tube. The lumen of the right tube was occluded a short distance from the internal orifice. By forcing the sound through this obstruction it passed into a sac with irregular jagged edges, below which the right round ligament was traced, and beyond it to the right the ovary was recognized, showing that the walls of this cavity, which were about one-eighth of an inch in thickness, were formed by the distended Fallopian tube. The left ovary was small, but normal. The right ovary was

reduced to a thin, flattened plane of fibrous tissue, containing a number of Graafian follicles which had undergone cystic degeneration.

These structures—viz., the posterior wall of the uterus, the right and left broad ligaments, and the remains of the ruptured sac, formed by the left Fallopian tube—constituted the anterior wall of a large cavity, which was bounded in all other directions by the small intestines and rectum, which were glued together by peritoneal inflammation. The walls of this sac were one-fourth of an inch in thickness, and consisted of layers of lymph, discolored by old hemorrhages. Its contents had been removed at the post-mortem examination.

Diagnosis.—Right tubal pregnancy; rupture of the sac at the third month; general peritonitis, resulting in the formation of a secondary sac around the fœtus.

THE RESONANT FUNCTIONS OF THE EXTERNAL EAR.

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IN a recent number of this journal (October 4, 1873) I alluded to certain phenomena of resonance which I had observed in connection with the external ear, but I did not venture beyond the simple description of these phenomena and a localization of them in various parts of the external ear. It is my intention in this article to give an explanation of the physical causes of the *resonant functions* of the external ear, referred to at that time (*loc. cit.*); and under the term external ear I shall include the meatus auditorius externus, and auricle, or pinna.

The auricle, in combination with the meatus auditorius, forms a resonator of a more or less conical shape, closed at the bottom by the membrana tympani, the special function of which is to strengthen by resonance those waves of sound which possess a short wave-length.

Let the accompanying diagram represent a section of the external ear, from the membrana tym-

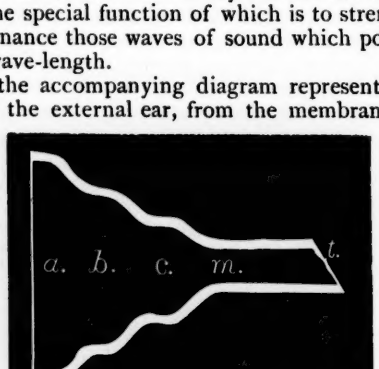

DIAGRAM REPRESENTING THE TOPOGRAPHICAL RELATION OF THE COMPONENT RESONANT CAVITIES OF THE EXTERNAL EAR.

a, fossa of helix; *b*, fossa of antihelix; *c*, concha; *m*, meatus auditorius externus; *t*, membrana tympani.

pani to the helix. The section is made from above downwards, parallel to the long axis of the meatus auditorius externus, and gives an ideal representation of the manner in which the resonator we shall consider is built up by the auditory canal and the successive columns or cups of air, represented by the concha and fossæ of helix and antihelix.

The widest diameter of this resonant cone or funnel, or miniature "speaking-trumpet," *i.e.*, the diameter obtained when the helix and lobe are made to approach each other about the opening of the external meatus as a common centre, does not exceed the wave-length of the note to which the resonator thus formed will respond. In order fully to understand how this resonant power is maintained by the external ear, and to sound-waves of what length it specially resounds, let us first consider the resonance of the meatus auditorius externus, and the physical reasons for such a function in it.

We know that the external auditory meatus resounds to the notes e^{iv} to g^{iv} (Helmholtz's Tonempfindungen, p. 175, 1870), and we also know that the column of air which most easily resounds to any given note is equal to one-fourth of the length of the wave of sound produced by that note (Tyndall "On Sound," p. 174, 1869). Now, the wave-length is found by dividing the velocity of sound per second by the number of vibrations executed by the sounding body per second (Tyndall, *op. cit.*, p. 84), and the quarter of the result of this division, *i.e.*, the quarter of the wave-length, will equal the length of the column of air which will act the part of a resonator for the note producing the sound-wave.

In order to appreciate this fact, let us work out a simple problem in physics, with the data before us, as follows. As already stated, the notes e^{iv} to g^{iv} have 2640 to 3168 vibrations per second, and the velocity of sound in atmosphere at 15° C. is equal to 1122 feet per second. Therefore, the length of the wave produced by the note of 3168 vibrations per second will be found by dividing 1122 by 3168. The answer will be, about three-eighths of a foot, or four and a half inches.

Now, the column of air which will resound to the note producing a wave of that length is equal to one-fourth of that wave-length, or one and one-eighth inches, which is just the short average length of the meatus auditorius externus. Some authorities give one and one-fourth inches as the average length of the meatus auditorius externus, but practically the normal human meatus has various lengths, passing gradually from the meatus proper into the concha; and this brings us to the second consideration connected with the phenomena of resonance manifested by the external ear, viz., that as the pitch of a note, let us say of e^{iv} or g^{iv}, falls, the wave-length must become greater, or, in other words, as the number of vibrations per second diminishes, the wave-length increases; which is but the enunciation of a common law of physics. It is now manifest that the column of air contained by the meatus auditorius externus will not be long enough to act as a resonator for waves of sound the quarter of which is represented by one and three-fourths to two inches.

Therefore, we find the concha superposed by nature upon the external auditory meatus, in order to lengthen it. We have already seen by experiments last summer that the notes which resound to the column of air represented by the concha, *i.e.*, the concha in conjunction with the meatus auditorius

externus, are lower than those which resound to the external auditory meatus when it is made to act alone, which we can accomplish by pushing the concha out of place by firm pressure of it against the head. The reason for this becomes very clear when we reflect that a note lower than those represented in the scale from e^{iv} to g^{iv} must have a greater wave-length, and therefore it requires a longer column of air as a resonator. If this lower note should fall in the octave below those notes already mentioned, the addition of the column of air in the concha to that of the meatus would supply the resonator.

If to this resonator, composed of meatus and concha, we add the fossæ of the antihelix and helix, we of course obtain longer or deeper resonating columns of air; and I know from my experiments that notes of still greater wave-lengths than those alluded to resound to the column of air represented by that contained in the fossæ of the auricle added to that of the concha and meatus auditorius externus.

By holding the hand behind or around the ear, we have the power of adding a still deeper column of air and its resonance to that of the external ear. Hence, the deaf person involuntarily places his hand to his ear, to increase, by resonance, the ordinary sound falling upon it. His hearing is thus strengthened, especially for those notes of high pitch and short wave-length to which the human voice owes its peculiar timbre or clang-tint. "It is indeed remarkable that the human voice should be so rich in over-tones (Obertöne), for which the human ear is so sensitive." (Helmholtz's Tonempfindungen, p. 176, 1870.) When the wave-length increases, as it does when the note becomes still lower than any of those alluded to, the resonance of the external ear ceases to exert any marked influence on the fundamental note. In such a case it is probable that the resonance of the room or street in which we are placed is aroused by the longer wave of sound; but nature has supplied us, in the external ear, with an ever-present and delicate resonator for just those notes of short wave-length in which the human voice is so rich and to which it owes its special timbre.

I would like to state here that these phenomena of resonance peculiar to the external ear were communicated by me to my friend Dr. A. H. Buck, of New York City, shortly after I had observed them last summer, and that, during the hours of travel which we spent together, the experiments were performed by him upon his own ear, with a verification of them satisfactory alike to him and to me.

We may, therefore, conclude that the external ear (*i.e.*, the meatus auditorius externus and the auricle) forms a resonator for those tones having wave-lengths the quarters of which are represented by the various depths of the column of air contained by the external ear.

The various interesting questions concerning the resonance of isolated portions of the auricle—*i.e.*, of the fossæ—when acting alone as resonators, as well as the *comparative resonance of the meatus auditorius externus*, shall, as I hope, form the subject of a future paper; but I would like to state now that the absence of a developed auricle in birds or insects is not, in my opinion, an argument against its utility as a resonator in man, for the wave-lengths of the high notes which these inferior animals must both use and hear as a means of intercourse with each other, are so short that they will resound perfectly well in the shallow auditory meatus found in them.

TRANSLATIONS.

CHRONIC PSEUDO-MEMBRANOUS PERITONITIS.—Dr. Ch. Baümler, of Erlangen (*Virchow's Archiv*), reports the post-mortem conditions found by him at the autopsy of a patient who died of Bright's disease in the German Hospital in London, upon whom the operation of paracentesis abdominalis had been repeatedly performed. The patient was a man aged 30 years, who, eight years before his death, had suffered from intermittent, which was followed by a general swelling over the body. Five weeks previous to his admission into the hospital on June 14, 1864, he had persistent epistaxis, and two weeks later, swelling of both feet came on. At the time of his admission he had general anasarca, and marked œdema of the legs. With the exception of a slight cough, there was nothing abnormal in the condition of the thoracic viscera. The area of splenic dulness was enlarged, that of the liver was normal. The urine at this time varied from 1200 to 2000 cubic centimetres in amount, was markedly albuminous, and contained tube-casts. From the time of this first admission until June 27, 1865, when he was admitted into Guy's Hospital, he suffered but little from œdema, but the urine still contained albumen. At this time the dropsy had become so marked that tapping was resolved upon, and was performed on the 4th of July, when 13,700 cubic centimetres of clear, yellow serum, containing albumen, were drawn off.

The operation was repeated on the 14th of the same month, and at this time much blood was mingled with the fluid drawn off, and the operation was followed by symptoms of peritoneal inflammation. Tapping was performed on several subsequent occasions, but the patient finally died of œdema of the lungs on the 15th of November, 1865. At the autopsy the legs were found œdematous, and upon opening the thorax there was found in the right pleural cavity some fluid containing blood, and there were also some threads of fibrin extending from the lung to the walls of the chest. The left lung was œdematous throughout. The heart and aorta were normal, with the exception of a slight thickening of the valves. Upon opening the abdomen a closed sac was found containing a loose mass of fibrin, in the interstices of which was a greenish-yellow fluid. The walls of this sac were three millimetres in thickness; their outer layer was fibrous, the inner somewhat less dense in consistence. None of the abdominal viscera could be seen until the posterior wall of this sac had been removed, back of which they lay. The thickness of the posterior wall was found to be about the same as that of the anterior wall, and the intestines were only loosely attached to it by organized adhesions. There was no connection with the liver, so that that organ bore to the posterior wall of the sac the same relation that it usually has to the parietal peritoneum. The surface of the false membrane towards the intestine, as well as the peritoneal surface, was deeply pigmented and smooth, like a serous membrane. The false membrane could be readily separated from the intestines, and also into several distinct layers. The perito-

neum beneath the false membrane, which probably was formed from the effusion occurring after the second puncture on the 14th of July, was in some places much thickened. A microscopic examination demonstrated that the false membrane was composed of fibrin with some fatty nuclei. The left kidney was found to be thoroughly disorganized, and adherent to the sac; the right was large and fatty. The spleen, left supra-renal body, pancreas, and the remains of the left kidney were all adherent to each other. From the apex of the bladder the false membrane extended to the promontory of the sacrum, completely separating the true pelvis from the cavity above.

The pigment found in the visceral peritoneum and the adjacent surface of the sac is an evidence that at one time there was great vascularity of the parts, and that there was hemorrhage after the first tapping; and it is possible that the parts were vascular up to the time of death, and that the blood only left them at that time.

W. A.

ACTION OF CHLORAL ON ALBUMINOID MATTER.—At a *séance* of the Académie de Médecine, held February 10, 1874, M. Personne presented the following summary of his experiments on this subject:

1. Fresh blood, to which hydrate of chloral has been added at an ordinary temperature, coagulates completely, preserves its red color, and remains without alteration at a temperature of 77° to 82° Fahr. When coagulated, it is insoluble in water.

2. Defibrinated blood, treated in the same manner, coagulates, but the coagulum is partly soluble in water. The dissolved matter has not been studied.

3. A morsel of muscle immersed in a ten per cent. solution of chloral becomes pale "flesh-color," and exudes a small quantity of reddish liquid, which deposits a brick-dust sediment. After exposure to the chloral solution for some hours the muscle loses the power of putrefaction, and exposed to a temperature of 60° to 78° Fahr. dries rapidly, and becomes friable. Dried at 212° Fahr., it constitutes a combination of chloral with the albuminoid matters of the tissues.

It does not furnish chloroform when treated by alkalies.

Like the combination of albumen with bichloride of mercury, it possesses the property of being soluble in an excess of either of its constituents, making its production a matter of some difficulty.

4. These facts suggested to M. Personne the idea of using chloral as a preservative for anatomical preparations, and he presented to the Academy a guinea-pig and a dog, the first of which had been injected with chloral solution four months previously, and the other eight weeks. Both were perfectly preserved.

Portions of muscle preserved in the chloral solution alone became dry and pulverulent, but if this was mixed with an equal quantity of glycerin they remained quite soft. A cerebellum was shown which had been preserved several months, and was still soft, fresh, and in excellent condition for anatomical investigation.

A. V. H.

EXPERIMENTS ON MECHANICAL ICTERUS.—M. Audigné presented, at a recent *séance* of the Société de Biologie, the liver and its appendages from a dog in whom the ductus communis had been ligated. The animal survived the operation nineteen days, emaciating rapidly, although having a voracious appetite. Within four hours subsequent to the operation, the urine, which had previously contained no trace of biliary coloring-matters, gave evidence of their presence in large quantity, and within a day or two the fæces were completely decolorized. The icteric tint of the skin did not show itself until the eighth day, from which period it became rapidly more marked, and finally could be observed in the mucous membrane of the mouth and nose. The animal finally succumbed with symptoms resembling those of uræmic poisoning.

The autopsy showed the liver to be enlarged and congested, with dilatation of all the biliary passages. Under the microscope the capillaries and vessels generally were found dilated. The lymphatics were filled with a citron-colored fluid, which was also observed in the thoracic duct.

That previous observers have not found bile appearing in the urine so soon after ligation of the common duct, is due, M. Audigné thinks, to the ligation not having been performed sufficiently close to the intestinal outlet; some of the afferent branches of the common duct joining it very near the intestinal wall. A. V. H.

ARSENIC IN THE FURUNCULAR DIATHESIS.—M. De Savignac (*L'Abeille Médicale*) makes use of arsenic in the treatment of the furuncular diathesis in the following way. Internally he prescribes,

℞ Sodii arseniat., gr. ii;
Aquæ, f℥v. M.

Of this mixture a teaspoonful in a little sweetened water is taken twice a day for three weeks. At the end of that time the arsenic is suspended, and for ten days sulphate of sodium is administered daily, in doses of half an ounce to an ounce.

He returns then to the arsenic as before, repeating the course of treatment, if necessary, three or four times. Occasional doses of decoction of dandelion or sarsaparilla are also administered, and the patient is confined to a diet chiefly vegetable.

Externally, poultices and, later, diachylon are used; and if the tubercles occur in groups, and are quite hard, the following emollient application is employed:

℞ Sulphuris sublimat., ℥ss;
Pulvis camphoræ, ℥ii;
Unguent. aq. rosæ, ℥iss. M.

A. V. H.

LOCAL APPLICATIONS IN NEURALGIA.—*Chloroform.*—Dr. Dupuy speaks very highly of this remedy used as follows. A pledget of lint moistened with chloroform is to be applied to the painful locality, and retained in position a longer or shorter time, depending upon the age, sensitiveness, etc., of the patient, and the part operated upon. Usually, half a minute to five minutes is sufficient, and the application may be renewed from one to a dozen times. Dr. D. states that recent and superficial neuralgias yield to one or two applications, and that even in severe sciatica of long standing he has never been obliged to make more than twelve.

Blisters to apophysal points.—The constant presence of such points in neuralgias, as shown by M. Armaingault, has led to the use of blisters applied in their immediate neighborhood, with very satisfactory results. In cases of facial, intercostal, lumbo-abdominal, and sciatic neuralgias, even when of the most persistent character and rebellious to other forms of treatment, this plan has been found effectual.—*L'Union Médicale*, Nos. 19 and 20, Feb. 1874. A. V. H.

PRESENCE OF LEAD IN THE BRAIN.—M. Troisier (*Le Mouvement Médical*), while making a chemical analysis of the brain of a patient who had been a worker in lead for more than thirty years but had never presented any signs of brain-disease, discovered well-marked traces of the metal.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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EDITORIAL.

THE ANNUAL OVERFLOW.

WE have already stated our opinion that the faculties of our colleges are not to be blamed for the disgracefully low standard of graduation which prevails, and that they are not to be expected to alter it: it only remains to give the reasons for this opinion. In the first place, let us look at the matter from the stand-point of one of the incumbents.

An ambitious young man determines, if possible, to become a professor in a leading medical school, and arranges his plans and mode of life in accordance with this desire. The amount of unpaid work which he does is simply enormous, and, lured by the mere chance of success, he sacrifices ease, and what to other men are the pleasures of life. All this toil and all this sacrifice, it must be remembered, go for nothing if the aspirant does not finally attain his goal. So far from bringing an immediate reward,—unless it be the chair of surgery, of obstetrics, or of practice, which is coveted,—these labors undoubtedly lessen the chance of rapid success in practice; for practice, like a coy maiden, must be wooed with a single eye, and the dear public will pet a man who spends his nights in the ball-room, club-house, or theatre, but will contemptuously call the physician who uses the same time in the laboratory a chemist, vivisector, bug-hunter, or what not. In this round of unremunerative labor the years pass, until in middle life, after a hard canvass, in which others, who have striven perhaps as hard as himself, suffer shipwreck, our hero is installed in the place of his ambition, and is overwhelmed by the congratulations of his friends. Full of zeal in the first flush of success, he looks around to see how he can carry out the long-cherished desires for reform. He finds that, his practice being only one-half that of his former class-mate, when his professorial fees are added the whole sum foots up two-thirds of the income of his less ambitious and perhaps less gifted neighbor, who has not pursued baubles, but the solid rewards of practice. He finds that he is a member of a highly respectable faculty and of an organization as rigidly crystallized as the quartz of his native hills. He finds, also, that if he conforms with this organization, at the end of the year he has some twenty-five hundred or three thousand dollars in his pocket; not an excessive honorarium for the work done. If he attempts to alter the organization, he soon perceives that it is hard to kick against the pricks, and that the probabilities are much greater in favor of his being crushed by the car of Juggernaut than of his stopping it. He inevitably—moved by self-interest and chained by stern necessity—slides into the traces, and pulls, side by side, shoulder to shoulder, with the first men in the medical profession of the United States. He were, indeed, a man of strange fibre that, under the circumstances, would offer himself for immolation.

These things being so, it is evidently folly to expect reform to come from within the faculties. A board of trustees, having the power and having themselves no pecuniary interest in the matter, may force the faculty into the change. But, unless they attach salaries to the chairs, such proceeding, although for the general good, would be arbitrary and unjust to the professors. Especially, however, is it unjust in the profession to expect the faculties to originate reforms. In the proposed changes the professors have nothing to gain and everything to lose, whilst the profession has everything to gain and nothing to lose. What right, then, has the profession to expect the faculties to inaugurate the reforms? With what justice does the profession ask the professors to sacrifice their livelihoods for a reform which can redound only to its (the profession's) good, and for which the profession will not make the slightest effort? The sacrifice must be made by some: let it be by those who gain by it. Let it be by those whose numbers will so divide it that each individual will scarcely feel his share.

There are two ways in which it is conceivable the profession could effect the desired change. That which is least practicable, because requiring greatest

consentaneousness and persistency of action, would be for the profession to force, so far as lies in its power, medical pupils to go to those colleges which adopt the advanced system. Thus, if our city schools found that a third, or even a fourth, of their classes, owing to the efforts of their own alumni, were going to Harvard, it would not be long before their courses would be prolonged. In other words, let the profession make it the interest of the schools to raise their standard, and they will do it.

Another, and seemingly far more practicable, as it is more just, method of reform, is for the alumni to raise endowment funds. It is certainly directly to the interest of practitioners that the present manufacture of rivals by steam should be checked. There must be nearly four thousand living alumni to either of the large medical schools in this city, and an average of fifty dollars each would yield a sum of $200,000 for each school, a sufficient endowment to start with. In order to secure the end, however, it would only be necessary to get a fourth of that sum paid in, and then let this be put out at interest, and in course of time the endowment would be in hand. Some of the alumni are rich, and assuredly it would not be difficult to obtain a number of subscriptions ranging from five thousand to five hundred dollars. Moreover, we think that no trouble would be experienced in obtaining subscriptions from gentlemen of wealth to aid the effort, if the profession showed itself in earnest by subscribing liberally itself; and the complete success of any such movement, if properly managed, seems to us assured. Certainly, if it were to fail, we ought all to hang our heads, and forever hold our tongues "about our high and noble profession,"—talk which, in view of the doings of commencement-day, has always seemed to us at best balderdash. In the name of a profession which ought to be high and noble, we hope some one will make the effort, and that clamor against or about the faculties will cease in action. Let those who have talked loudest do most.

In some of the New York colleges the effort is being made to raise endowment funds for new chairs. We are not entirely *au courant* with the movement, and may misconceive it; but, as we understand it, we do not like its drift. It is not new professors, on whom students may or may not attend, but forcing the students to know that which is at present taught, that is needed. When the present professors are independent of their scholars, it will be time enough to raise endowments for new chairs.

THE COMPLIMENTS OF THE SEASON.

THE *Medical and Surgical Reporter* renews, in a late issue, its attack upon this journal, or, rather (for the attacking party is evidently trying to haul off), feebly replies to our notice of its original assault. It reiterates its incorrect statements, and calls us a phœnix, without in any way meeting the very distinct points we made in our last editorial,—a procedure which reminds us of the boy who, getting the worst of a fight, begins to blubber, "I'll tell my mother on you." We may be a phœnix; if so, we must be a young, vigorous one, and have nearly five centuries of life before us,—not a very unpleasant prospect; but if ever by reason of age we get as feeble as our venerable cotemporary, we trust our friends will see that we mount the funeral pyre before the appointed time. We are further likened to "Vholes;" our obliquity of vision is commented upon, and in a characteristic clause, in which the words (omitting the prepositions and articles) average ten letters each, we are read a lesson upon the "proprieties," all simply because we advertise. We remember once to have been in a boarding-school in which there was read every week a fierce blast against the use of tobacco by a governor who, when he came to the passage, rolled the delicious quid into the farthest corner of his mouth. We are afraid our friend, in writing concerning the proprieties for our reproof and edification, must have seriously endangered himself; for, being in possession of the knowledge that the *Reporter* advertises as much as it knows how, and remembering also how with one hand he had filched our columns for editorial and with the other had smitten us hip and thigh, he must surely have actually swallowed the quid.

THE Philadelphia correspondent of the *Boston Medical Journal* says in a recent letter:

"It is said that the remains of the twins will now *be carried through the States on exhibition;* that the loving widows are filled with a burning desire to make the twins profitable even after death; that, however, strenuous opposition to this delightful and savory plan has arisen on the part of an invalid daughter of one of the brothers. There may yet be an opportunity in Boston to gaze upon the forbidding, shrivelled remnants of Chang and Eng."

The correspondent is scarcely to blame in re-echoing the universal report in regard to the family of the twins, but we trust that in his next letter he will correct what is in truth an atrocious libel. It seems that the widows of the twins were

persuaded, by the conjoined eloquence of their usual legal and medical advisers and of the commission, to allow the bodies to be brought North. The two sons of the deceased were living in the far West, and, on arriving at their homes, were overwhelmed with mortification and grief at learning the course events had taken. Week before last they arrived in this city, and a sadder couple it has rarely fallen to our lot to see. When Prof. Allen, as they stood with tears in their eyes before the corpses, expatiated upon the perfectness and success of the embalming process, they heard him through quietly. As soon as he had finished, very sadly and very earnestly one of them asked, "Doctor, is it possible to undo this? Can the fluids be taken out? We would give anything to have the bodies as they were." Their grief was evidently very real, and we would not have dragged it even thus far into publicity had it not been for their evident desire that the public should know their abhorrence of all that has been done in the matter. If the young men, who are now the heads of the respective families, had been at home at the time of their fathers' death, the bodies of the twins would never have reached Philadelphia.

THE past season has been a very successful one with our medical schools,—the Jefferson graduating 151 men, and the University 121. Considering the great disadvantages the latter institution labored under in being, as it were, houseless, and dwelling in the tents of a strange people, we think both the faculties are to be congratulated on their success. We do not doubt that the standard of graduation with these schools is as high as that of any similar institution in the country, always excepting noble Harvard, and the opportunities they offer for clinical study are almost unrivalled.

If any student has the nerve and muscle to contend with New England climate, customs, and examination, and desires to get the most valuable diploma in the country, Harvard should be the school of his choice, and Boston his wintering city. To those of not such robust faith, purpose, and ability, we can heartily commend Philadelphia and its colleges.

WE are indebted to Dr. J. L. Bodine, of Trenton, for the knowledge that the bottle of medicine and the stomach of the deceased James A. Grant, the victim of the alleged poisoning some time ago commented on in our columns, have been sent to Prof. Rogers for examination.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, FEBRUARY 26, 1874.

VICE-PRESIDENT, DR. H. LENOX HODGE, in the chair.

DR. MORRIS LONGSTRETH presented a specimen of intestine containing *multiple intussusceptions*. The patient from whom it was taken suffered an injury of the fore-arm, for which amputation was performed. For some time previous to death, which occurred from obscure causes, he had had a profuse diarrhœa. At the autopsy there were found eight invaginations of the small intestine, all occurring in its upper-half portion. The largest was not of a greater extent than three inches, while the smallest was not over half an inch. They were easily reducible, three of them having been pulled out previous to the specimen being brought before the Society. There were no evidences of any inflammatory trouble at these points or at other portions of the abdominal cavity. No lymph or adhesions, nor any congestions, were found in any portion of the intestine.

Dr. H. LENOX HODGE asked whether there were no symptoms previous to death pointing to the condition of the bowel.

Dr. LONGSTRETH replied that there were none except the diarrhœa alluded to in the history of the case.

Dr. WHARTON SINKLER recalled a patient who died of phthisis, and in whom a number of intussusceptions were found post mortem, but he was also the subject of diarrhœa before death.

Dr. JAMES TYSON had met, occasionally, in adults as well as children, intussusceptions which had not been suspected before death; the important difference between these and those which gave rise to symptoms before death being in the presence of peritonitis, of which they became a cause. He referred to the specimen which he had presented at the previous meeting, and which was taken from an infant in whom there had been diffuse peritonitis with obstruction before death.

Dr. A. C. W. BEECHER presented a specimen of *intussusception* taken from a child less than fifteen months old, in which there were five intussusceptions (four existing at present, one having been pulled out) in a portion of small intestine two feet in length. They are all invaginated in the same direction, two of them extending fully an inch and one-half. There are no inflammatory deposits or adhesions. There were no symptoms before death pointing to this condition, and he was not looking for it when it was found. He had also found at about the same time, while resident physician at the Philadelphia Hospital, similar unlooked-for intussusceptions in very young children whom he had examined post mortem, but not so many invaginations in so short a piece of intestine as this.

Dr. H. LENOX HODGE exhibited *sections of the condyles of the femur and of the head of the tibia and the patella*, removed to-day by exsection of the knee-joint, at the Presbyterian Hospital. The patient is sixteen years of age, and is in good condition. He has suffered from arthritis of the right knee for about five years. A year ago he was in a hospital for three months, under treatment by rest and counter-irritants, without permanent benefit. Since then he had suffered much pain, and been obliged to use crutches when he moved about.

The semilunar cartilages have been completely destroyed, and in several places the articular cartilages on both the femur and tibia, and at these positions the bone is carious. Upon making the sections with the

saw, the bone above the joint was found softened. The patella and its cartilage are less diseased than the femur and tibia.

Dr. HODGE asked the opinion of the members as to the probable cause of the complete destruction of the semilunar cartilages.

Dr. JOHN ASHHURST, Jr., said that, according to his experience in those cases in which the disease originates in the synovial membrane, particularly in cases of gelatinous arthritis, the semilunar cartilages disappear at a comparatively early period; whereas in those cases in which the disease originates in the extremities of the femur and tibia the articular cartilages suffer more, and the semilunar cartilages are found comparatively unaltered.

Dr. HODGE asked Dr. Ashhurst whether he had ever met cases in which there was not a trace of the semilunar cartilages left.

Dr. ASHHURST replied in the affirmative.

Dr. JAMES TYSON presented a specimen of *enormous hypertrophy of the heart* which had attended marked contraction of the kidneys in a patient dying at the Philadelphia Hospital. There was no valvular disease except slight thickening of the mitral valves.

The kidneys exhibited in a striking degree, to microscopic examination, the hypertrophied condition of the muscular coat of the arterioles pointed out by Ludwig, Traube, Johnson, and others, as well as the other minute structure of the chronically-contracted kidneys.

At this meeting of the Society, a committee was also appointed to which was referred the subject of the so-called "ovarian cell," pointed out by Dr. Drysdale. The committee was directed to make comparative investigations of ovarian, serous, cystic, and other fluids with a view to determining the existence of a cell sufficiently distinctive to be called "ovarian cell." The President appointed Drs. Tyson (chairman), Bertolette, Richardson, Jenks, Mears, and Willard, with power to increase this number.

REVIEWS AND BOOK NOTICES.

TREATISE ON THERAPEUTICS: COMPRISING MATERIA MEDICA AND TOXICOLOGY, WITH ESPECIAL REFERENCE TO THE APPLICATION OF THE PHYSIOLOGICAL ACTION OF DRUGS TO CLINICAL MEDICINE. By H. C. WOOD, JR., M.D. J. B. Lippincott & Co., Philadelphia, 1874.

The want which this work of Dr. Wood is written to supply is a very real one, as any one must have felt who is constantly asked by students for the best text-book in therapeutics, and who is as constantly constrained to reply that there is none in English wholly or approximately satisfactory. The books written by those whose lives have been passed in the practice of medicine, and which are chiefly of a clinical and so-called practical character, seem very meagre to the physiologist, and must always be open to the very grave objections urged against supposed therapeutic facts based upon the usual clinical observation alone. Such are the works of the elder Dr. Wood, Waring, and Stillé. The latter, although by no means rejecting experimental data, has not kept pace with recent investigation, and fails in that appreciation and co-ordination of isolated facts which we have a right to expect in a systematic treatise. It has been, however, on the whole, the best work on the subject.

The little work of Dr. Ringer is exceedingly attractive from its conciseness, the positiveness with which its views are announced, and the apparently great confidence which the author places in the practical resources of therapeutics. But the experienced physician can hardly sympathize with the author's enthusiasm, and the student who accepts his views without a very liberal allowance of skepticism is preparing for himself a future of disappointment. Besides this, it is entirely devoid of systematic arrangement, a deficiency which, notwithstanding all that may with truth be said of the impossibility of a scientific classification, is a very great one.

Nothnagel's book has been, since its recent (1870) appearance, by far the best one; and had there been a good translation it would have been at once recommended by the writer to all his students, as the German original now is to those who can read it. And from this position he is not yet prepared to displace it.

Dr. Wood in his preface fully recognizes the perplexities and contradictions which beset the older method of therapeutic investigation, and desires to avail himself of experimental results so far as possible. He says that he is surprised to find how much has been done in this direction; and we must congratulate him upon the success with which he has searched in the literature of experimental pharmacology, which is indeed extensive.

He says, "The plan of the present work has been to make the physiological action of remedies the principal point in discussion. A thoroughly scientific treatise would in each article simply show what the drug does when put into a healthy man, and afterwards point out to what diseases or morbid processes such action is able to afford relief.

"Unfortunately, in the great majority of cases, our knowledge is not complete enough for this, and the clinical method has to be used to supplement the scientific plan."

We cannot altogether agree with him here: pathology is not yet sufficiently advanced, if it ever will be, to make an *immediate* application of experimental pharmacology of practical use, no matter how perfect the latter science may be; and we think it a mistake, and one calculated to retard the advance of therapeutics, to oppose experiment to "clinical observation." Granting that the latter method of investigation is exposed to almost innumerable chances of error, from which the former is free, and acknowledging that a vast amount of so-called clinical observation is utterly untrustworthy, it is not necessarily so. If it is a "pursuit of knowledge under difficulties," yet a measure of knowledge, at least, may be attained by disinterestedly seeking for it; and when it is attained it is directly useful. The foundation of science is not in the subjects investigated, nor in the special means of investigation, but in the scientific mind, the logical spirit in which the work is carried on.

Dr. Wood should remember, too, that disagreements between various experimenters, not only as to the theories, but also as to the facts, in experimental observations on drugs, are by no means unknown, and that physiology is far from being a complete science, even in regions which have been industriously explored.

However much we are inclined to disagree with the author's preliminary views, we do not feel so much disposed to find fault with the way in which he has carried out his views. No writer on this subject can possibly get rid of clinical results if he wants to; and the author has not attempted it.

Lists of antispasmodics and alteratives, the latter including sarsaparilla, guaiacum, sassafras, and dandelion, show that he thinks the opinions of his predecessors worth mentioning, even if he does not agree with them.

The classification seems not altogether satisfactory in many points; but, as the writer is obliged to say the same of every one that he has yet seen, including his own manufacture, it is hardly worth while to do

more than mention, for instance, that all the alkaloids of opium cannot properly be included under the head of analgesics; that the mydriatic action of atropia is not its principal one; that the division of emetics simply into vegetable and mineral ignores a more important physiological distinction; and that drugs like epispastics, which act only through the nervous system without entering the blood, ought not to be placed in the same division with those which, like diuretics, are absorbed and re-secreted,—some of them at least having a decided effect in the excretion of solids, rendering probable an action upon the general metamorphosis of tissue.

In the body of the work, Dr. Wood has given a brief, but, for his purposes, sufficient, description of the drugs discussed. Then we have a statement of physiological and clinical facts, so far as they contribute to a knowledge of the *modus operandi* of the drug; and, in conclusion, a summing up of actual results, indications for use, and methods of administration. The poisonous action is stated; since it may not only contribute to a knowledge of the mode of action, but because the physician may have to combat toxic effects, or inform a court in criminal cases.

The author has—very wisely, we think—avoided on the one hand long theoretical discussions about words, though not neglecting such a statement of theory as may best harmonize the facts; and, on the other, such absolutely valueless but apparently "practical" statements as that Dr. Weissnicht of Mudfog "deems sassafras a sovereign remedy for peritonitis," or that "Dr. R. Pipiens, of Barking Hollow, has cured a hundred cases of croup (many of which were supposed to be membranous) with a syrup of symplocarpus fœtidus."

If it should seem to some critics, as it probably will, and as the preface leads us to expect, that the clinical side is somewhat neglected for the experimental, it should be remembered that this condition is precisely the opposite of that which obtains in nearly all the works on therapeutics already in use, and that this is strong where they are weak. Still further, if this book is to be used, as it will be, for a text-book, the student begins with that part of the subject which is the more accurately known, and proceeds thence to the practical application of his knowledge,—being thus provided with a basis for intelligent appreciation and criticism before beginning his observations on the practice of his clinical teachers. No one can deny that it must contribute immensely not only to the welfare of the patient, but also to the comfort of the practitioner, that the latter should begin his professional life with a clear understanding of the mode of action of drugs, and a rational skepticism as to their therapeutic value, rather than encouraged by vain promises of success which can never be fulfilled, and take refuge, after years of random attempts and disheartening failures, in the skepticism of ignorance.

We think that this work will be a very valuable one to teachers and students, as well as to those who wish to have at hand some statement of the latest physiological and experimental investigations without going through the labor necessary to find them in the periodical literature of the last two or three decades.

The book seems very free from misprints and misspelling, and the neatness of its dress is sufficiently guaranteed by the names of the publishers.

ROBERT T. EDES.

HARVARD UNIVERSITY MEDICAL DEPARTMENT.

ANNUAL REPORT OF THE SUPERVISING SURGEON OF THE MARINE HOSPITAL SERVICE OF THE UNITED STATES FOR THE FISCAL YEAR 1873. By JOHN W. WOODWORTH, M.D.

This report gives the laws regulating the marine hospital service, the progress of the re-organization of the same, the details of the year's working, and some papers of general professional interest. Among the latter we would especially notice those on yellow fever, one of them containing a very elaborate table giving the localities in which yellow fever has appeared since A.D. 1868, their elevations above the sea, and the duration and time of the epidemics, as well as the mortality.

We notice that there were treated during the year in the various hospitals of the service, at an average cost of one dollar per day, 12,697 seamen, and the hospital-money collected from the seamen was $335,845, —facts which show the great importance of the service.

GALVANO-THERAPEUTICS. Lindsay & Blakiston, Philadelphia, 1873.

This little book of sixty-five pages, the name of whose author, strangely enough, does not appear on the title-page, is, we believe, a revised reprint of a report made to the Illinois State Medical Society in 1873 by Dr. Prince. It is by no means a complete treatise on the subject, but contains interesting, although dilute, reports of the use of the remedy in various cases. Those who wish complete libraries will of course purchase the memoir, but we do not think it can in any way supply the place of larger and more complete works. We notice that tendency to let loose the imagination, which seems an inherent property or quality of most medical electricians. Thus, we are told in inflammations to apply the negative pole to the inflamed spot, so as to diminish the oxygen in the part, and thus "starve the phlogosis."

GLEANINGS FROM OUR EXCHANGES.

SPECIMEN OF FATAL CAUTERIZATION OF LARYNX AND ŒSOPHAGUS.—Dr. Jacobi (*N. Y. Obstet. Soc. Trans.*, December 2, 1873) exhibited the digestive organs of a child, nine months of age, which had been taken ill with what had been reported as croup. The medical attendant advised cauterization of the larynx, and attempted it with the solid stick of nitrate of silver: the stick broke, however, and the child swallowed the detached portion. The child died, and the specimen removed at the autopsy was sent to Dr. Jacobi, with the above imperfect history. The epiglottis, upper vocal cords, the whole interior of the larynx, and the upper portion of the trachea, appear considerably reddened and hyperæmic, which, however, may be partly due to imbibition: at all events, there were no traces of croup, but only the indications of a simple laryngeal catarrh. The action of the nitrate of silver was not localized, but the whole laryngeal mucous membrane was equally injected and hyperæmic. The œsophagus was injured by the caustic to the extent of one inch at its commencement, a distinct eschar being visible. The stomach shows no injury in its cardiac portion, the piece of caustic having followed the dependent position of the organ and lodged near the pylorus, where a solid piece of the stick of nitrate of silver is still to be seen, surrounded by a thick layer of albuminates, and imbedded in the coats of the stomach; there is no secondary local inflammation about this spot, an observation agreeing with the acknowledged action of lunar caustic.—*Amer. Jour. Obstet.*, February, 1874.

PUERPERAL THROMBOSIS (*The Lancet*, February 28, 1874).—At a meeting of the Obstetrical Society of London, the above subject was discussed.

Drs. Playfair and Hayes pointed out that thrombosis had a wider application than was commonly given

it, as a cause of disease and of sudden death in puerperal women. Attention has been chiefly limited to only one of the manifestations of this disease, on account of its tangible symptoms,—phlegmasia dolens, which is, however, dependent upon the same conditions as ante-mortem plugging of the pulmonary artery, the clots being produced by the changes wrought in the blood by the pregnant state or its accidents, such as flooding, septicæmia, etc. Dr. Taylor thought there were three points worthy of notice: 1, it appeared that the patients were suddenly found to be at the point of death before any danger had been apprehended; 2, in those cases which were examined after death a firm laminated clot was discovered, evidently not of very recent formation; and 3, in those cases in which a stethoscopic examination was able to be made, some abnormal sound was discovered at the base of the heart. He would suggest, therefore, that if the heart-sounds were subjected to examination during the puerperal period, either as a matter of routine or, at any rate, more generally than they usually are, in all cases, or at least in those in which thrombosis is prone to occur, as after hemorrhage, the danger might in some cases be foreseen, and by suitable treatment be lessened or averted. Dr. Routh extolled the efficacy of liquor ammoniæ in the prevention of thrombosis, or in the removal of clots already formed.

Treatment of Pityriasis Rubra (*The Lancet*, February 28, 1874).—Dr. Tilbury Fox believes that in cases of pityriasis rubra—hyperæmia of the skin and exfoliation of the cuticle—the free use of diuretics is called for, especially in cases which come under observation at an early date, before the hyperæmic state of skin has given rise to secondary alteration, such as infiltration into the tissues. It is an established rule in renal therapeutics to stimulate the skin to increased action in cases where the kidneys are congested, or in other conditions in which it is desirable that they should be given rest from work. In the case of a hyperæmic state of skin, where this hyperæmia is not removable by local remedies, and where it is extensive, it is likewise desirable to stimulate the kidneys to increased activity, to relieve the skin of its work,—to give it rest.

Dr. Fox uses a diuretic mixture composed of half a drachm each of acetate and bicarbonate of potassium, one drachm of spirit of juniper, and one ounce of infusion of calumba, for each dose, three times daily. The skin is soothed by oily inunctions, and perchloride of iron is administered internally to act as an astringent to the weakened cutaneous vessels.

Danger of Intra-Uterine Injections.—The *Gazette de Joulin* gives the details of two cases, which show that while intra-uterine injections are energetic agents in modifying the conditions of this mucous cavity, they should only be employed with caution.

In one case, though the patient had become enfeebled by repeated hemorrhage, she endured, without suffering inconvenience, two injections of the uterine cavity. A third, consisting of a weak infusion of chamomile and diluted perchloride of iron, was succeeded by death in thirty hours after decided symptoms of subacute peritonitis. The mucous lining of the uterus and right Fallopian tube, and the adjacent peritoneal surface, were found, after death, covered with an ink-black clot and presenting unmistakable evidences of inflammation.—*Medical Examiner.*

Congenital Deformity from Impression upon the Mind of the Mother (*The North-Western Med. and Surg. Journ.*, March, 1874).—Dr. Franklin Staples reports the following case. A laborer, working in a stone-quarry, had his right hand badly crushed by a falling derrick. The mangled part was amputated, but the loss of the thumb and forefinger and subsequent contraction of the tendons resulted in an ugly deformity. At the time of the accident, and for some months afterwards, the man resided in a boarding-house, the mistress of which was pregnant. While he was ill she nursed him and dressed his hand, although with a strong feeling of dislike and almost of disgust, and subsequently the frequent sight of the stump greatly annoyed her.

In due time she was delivered of a healthy female child, well formed and fully developed in all respects, with the exception of its right hand, the three middle fingers of which were absent. The general appearance of the two deformities was remarkably similar. Both parents were healthy; their other children had been well formed; and no instance of congenital deformity had ever occurred in their families.

Scirrhus of the Mesentery (*North-Western Med. and Surg. Journ.*, March, 1874).—Dr. Staples reports a case diagnosed to be scirrhus of the mesentery, involving duodenum and pylorus. German, male, aged 50, sick four months, pain in epigastrium, frequent vomiting, obstinate constipation, emaciation, cancerous cachexia, tumor three inches in diameter, circumscribed and movable, nearly in centre of epigastrium. The patient had worked in a sawmill, and had worn a tight leathern belt for years, instead of suspenders. Dr. Staples had known another case of scirrhus of the pylorus in a man who had worn a tight belt, and another of cancerous disease of the mesentery in a patient who had for several years worked in a shingle-mill, where he was compelled to lean over the bench of his machine, bringing a constant pressure to bear across the abdomen.

Postural Treatment for Extensive Distention of the Intestines with Gas (*Chicago Medical Journal*, March, 1874).—Dr. Chas. T. Parkes recommends that what he terms the "postural treatment" should be tried in all cases of tympany, especially in those complicating gestation. A large enema should be given, so as fully to empty the lower bowel; the patient should then be turned with the face downwards, so as to throw the weight of the body on the distended abdomen; the thighs being flexed upon the abdomen, the patient should be directed to make straining efforts, which are usually followed by the escape of large quantities of gas.

MISCELLANY.

Cremation.—The subject of cremation is again taken up by Sir Henry Thompson in the pages of the *Contemporary Review*. In this article he replies to various criticisms that have appeared in different journals, and gives a detailed account of the process he would suggest as most appropriate for the object in view. Sir Henry states, and it is certainly a somewhat remarkable fact, that the only formal opposition to cremation has been made by the present medical inspector of burials for England and Wales, Mr. Holland; and in reply to the observations of this gentleman, Sir Henry refers to the evidence obtained by Drs. Southwood, Smith, Waller, Lewis, and others, in regard to the large amount of gases produced in the decomposition of the body, and the impregnation of soil, water, and air to a considerable distance. Such impregnation by the dead, and consequent danger to the living, cannot, we presume, be questioned for a moment, and is fully borne

out by the statements of Mr. Bowie and the general experience of the profession. We must also fully endorse Sir Henry's remarks in regard to the elimination of ammonia, or at least of carbonate of ammonia, from decomposing animal tissues, and are at a loss to understand how any doubt can exist about the point.

Turning to the second part of Sir Henry Thompson's essay, he remarks that he has personally superintended the burning of three bodies of animals, one weighing forty-seven pounds, another one hundred and forty pounds, and a third no less than two hundred and twenty-seven pounds, with the most satisfactory results, the residue in the first instance weighing only one and three-fourths pounds, and the second four pounds. In the last case the body was placed in one of Dr. Siemen's furnaces, the interior of which was heated to about 2000° F. The inner surface of the cylinder, which was about seven feet long by five or six feet in diameter, was smooth, almost polished, and no solid matter but that of the body was introduced into it. The gases, which were at first abundantly given off, passed through a highly-heated chamber, among thousands of interstices made by intersecting firebricks laid throughout the entire chamber lattice-fashion, in order minutely to divide and delay the current, and to expose it to an immense area of heated surface. By this means they were rapidly oxidized, and not a particle of smoke issued by the chimney. No second furnace was therefore in this instance requisite, though under certain circumstances the products of combustion might be transmitted through another, and the fumes from this into a third, and so on, each being made available for the combustion of one body. The process was completed in fifty-five minutes, and the ashes, which weighed about five pounds, were removed with ease. Sir Henry meets the objection that has been raised to the practice of cremation, that it will lead to an increase of crimes of poisoning, by suggesting that a public verificator of the cause might be appointed, whose duty it should be to ascertain and certify the cause of death, whilst the stomach might be kept for some years. In reference to the expense, he still thinks it would be far within the present cost of a funeral. As regards ourselves, we have already expressed our opinion that it is an eminently satisfactory mode of disposing of the dead,—safe, speedy, wholesome, and economical; but we rather doubt whether ancient custom and popular prejudice can be so easily overcome and altered as Sir Henry Thompson appears to believe.—*London Lancet.*

UTILIZATION OF SEWAGE.—The following facts with regard to the utilization of the sewage of the city of Paris are taken from the official returns. At Clichy, a bend of the Seine forms a sandy, level peninsula of some 5000 acres. The barrenness of this peninsula is proverbial, and hence it was on this land that a portion of the city sewage was first directed, with a view to put the utility of this kind of fertilization to the severest possible test. The preliminary works were begun in 1868, and completed in May, 1869. From that time between 5000 and 6000 cubic yards of the sewage have been raised daily by engines of forty-horse power and centrifugal pumps, and of this two-thirds were received into tanks for chemical manipulation, the remainder being applied to a piece of land twelve or fifteen acres in extent. At the end of several months, the results of this experiment upon a naturally poor soil were such that the neighboring farmers asked to be included in the benefits derived from the sewage. Owing to the extreme permeability of the soil, 20,000 cubic yards of sewage could be annually absorbed per acre, and the farmers obtained crops of 70,000 pounds of cabbages, 60,000 pounds of carrots, and 150,000 pounds of turnips. All land suitable for irrigation rose in value. No evil effects on the health of the inhabitants could be detected, and a village sprang up around the works. A Parisian perfumer established his manufactory on the outskirts of the irrigated land, and obtained a supply of the sewage-water for his gardens of aromatic herbs, more especially of peppermint. It is worthy of note, in this place, that the finest mignonette of Covent-Garden Market, London, has long been grown from sewage-irrigated soil.—*Popular Science Monthly.*

DR. LOUIS A. DUHRING was recently elected Lecturer on Dermatology in the University Hospital.

Dr. H. C. Wood was also appointed to the position of Clinical Lecturer on Diseases of the Nervous System, and Dr. James Tyson Lecturer on Pathology and Histology, in the same institution.

DEATH OF DR. FORBES WINSLOW.—Dr. Winslow was born in London, in 1810. He began his medical studies in New York, took the degree of M.D. at King's College, Aberdeen, and became a member of the Royal College of Surgeons, London, in 1835. His first published works appeared in 1831, since which time he has made numerous important contributions to the literature of medicine, chiefly in the department of nervous and mental diseases. His most valuable work in this line, "The Obscure Diseases of the Brain, and Disorders of the Mind," was published in 1860, and has since passed through several editions. He died in London on March 4, 1874.

NOTES AND QUERIES.

[THE following extract from a letter to Dr. T. G. Morton, of this city, by Lawrence M'Cully, Esq., of Honolulu, in regard to leprosy, has seemed to us to be well worthy of a place in this department of the *Times*.—ED. P. M. T.]

The question of our exposure to the disease came to us, the foreign community, within the year, with terrible personal interest. While the new government of Lunalilo was energetically prosecuting the sad business of collecting the lepers, separating them from their families, and deporting them to perpetual seclusion, it was rumored that two or three white men of respectable station had the disease. One was M. C——, a French gentleman, say of 55 years, a resident here for perhaps ten years. He had come here with his wife and family; had been a widower for five years. He had suspicious blotches about the temples, or below, and a thickening of the lobes of the ear. Of course he disclaimed it; if I remember, he passed some medical examination; he continued in public. The signs of it were such that the public feared communication with him. A further examination was insisted on, and, being stripped, he was found covered with an unmistakable leprous eruption, was confined in the receiving hos-

pital, and subsequently, having made his own arrangements to be received by the French government at Tahiti, was transported thither, and has since been taken to France. He claimed at first, stoutly, that he had not exposed himself by illicit connection, and that he must have got his disease from his washed clothes, or otherwise innocently; and we thought, from his age, his family circumstances, etc., that it was so, and just that was what frightened us. It was not doubted that men of promiscuous licentious habits exposed themselves to something worse than venereal, but if wholesome, respectable, and moral men, as well as women and children, were liable to take the disease, we must flee the country at any sacrifice of property. But investigation relieved us by finding where M. C—— got his disease, and confronting him with the very woman, who had become a developed leper.

Then there was the case of Mr. B——, "Judge B——," published a short time since in the California papers. Mr. B—— was well known to all of us here,—a family man, beyond middle life when he left here: a church-member, in the odor of respectability; no rumor tainted his name; a man of fastidious personal neatness, and refined tastes.

Some time after he left the kingdom, to live in San Francisco, we heard that he had a mysterious disease; leprosy was sometimes hinted. He still kept in public, holding his office of Commissioner in Bankruptcy till shortly before his death. We have no doubt here, and I understand there is now no doubt there, that it was leprosy. How did he get it? We must think that, all unsuspected, he yielded to temptation, and suffered in this terrible and exceptional way. Rev. Mr. Damon told me that some one, whose name he did not give me, told him that he knew that such was the fact, mentioning the house itself where Mr. B—— had resorted.

But three or four foreigners have been found with leprosy; all of them of a class as liable to take it as the natives, because they live in about the same way. One was a German blacksmith,—my nearest neighbor, in locality; my residence is out of town. He used to say that he feared he had the leprosy. This was some six years ago, when there was less alarm about the matter. For some time he had enlargement of the ears, and some leprous appearance on his forehead. On a final examination, for which he presented himself, it was settled that he had the disease, and should go to Molokai. He was allowed time to settle his humble affairs, and went, now five years ago. I have learned that the disease has progressed so that his fingers and toes have dropped off. His wife, a native woman, followed him there, and still remains, and, as yet, does not herself show leprosy. His five children were left behind, and show no symptoms of it. Three of them, boys, of 11 years and under, remain in my neighborhood, and are daily about my house,—poor little waifs!—living from my kitchen, as nice-looking as any native children.

One of the foreigners who has the disease is Williams, an elderly man, a mason by trade. I saw him at the Kalihi Receiving Asylum, at the only visit I have made there. The disease appeared externally on him, in his ears, hands, and forehead. In some conversation, he appeared very well; said that he was careful to avoid giving contact to any of his friends who visited there; that he was deriving some benefit from medicine he was taking experimentally. He showed us his son, a small boy, among the lepers, who was a pitiable spectacle. His wife (a native) had died of the disease. My impression is that all their children have it. Williams said it first appeared in the family after they had all been many hours in the sea, from the capsizing of a little inter-island coaster, when this Hawaiian woman for half a day assisted her husband and sustained her children, swimming to the shore.* It is understood that the general cachexy of the Hawaiians has greatly promoted the spread of the disease,—indeed, is almost a condition of it. You are aware of the great diffusion of the syphilitic taint among them: this is aggravated by neglect, uncleanly habits, ill-ventilated houses, etc., and especially by the use of *awa*, which itself depraves the blood, and makes the user of it look like a white-scaled leper, and diffuses any contagious thing they may have, by their mode of preparing and using it, which is by having persons to chew it, and, collecting the saliva (which it excites in quantity) in a bowl, diluting it, perhaps, with water, all drink from the same. So, too, their custom is to draw several whiffs from the pipe, and pass it on through the circle, carrying from lip to lip whatever disease any one person may have.

To the Editor of the Philadelphia Medical Times:

Dear Sir,—Having made more than one attempt to medicate the fundus of the uterus, as suggested by Dr. William Goodell in his articles published in the *Medical and Surgical Reporter*, I cannot help expressing my conviction that the medicine used, be it tincture of iodine, or what not, is entirely wiped off as it passes through the cervical canal. If the gentleman can offer proof that he does get his medicine in contact with the mucous lining of the fundus, I have nothing more to say. In my humble opinion, the benefit derived is due to the direct effect upon the cervical canal, for I feel sure that when the attempt is made to introduce a probe, wrapped with cotton, dipped (we will say) in the tincture of iodine, through the cervical canal to the fundus, the cotton is squeezed dry, so that he *does* reach the fundus, but with a pledget of cotton only stained with iodine, from the point of which (the pledget) I fail to see how he can medicate.

Yours, very truly,

March 25, 1874. Subscriber.

To the Editor of the Philadelphia Medical Times:

A medical man practising in Nebraska has just written me, in a private letter, an account of an accident the possibility of which may not have been familiar to all surgeons. Perhaps, therefore, it ought to be made useful by publication.

Having to treat an old man of 83, for distressing retention of urine, produced by enlarged prostate, along with stricture of the urethra, he succeeded, with difficulty, in introducing an elastic catheter into the bladder. While, however, he was withdrawing the stilette, the catheter *broke in the middle*, leaving a considerable portion in the bladder. An operation was performed successfully for its removal. About fifteen days afterwards the patient's death occurred,—although not referred, by the gentleman giving the account, to the accident, or to the operation following it.

The catheter employed appeared to be sound, but was probably old, and had been used but once before.

Very respectfully,

Henry Hartshorne, M.D.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.

1400 Pine Street, Phila., March, 1874.

The Annual Session will be held in the city of Easton on Wednesday, May 13, 1874, at 3 P.M.

The Address in Surgery by Thomas M. Drysdale, M.D., Philadelphia.

The Address in Medicine by T. H. Helsby, M.D., Luzerne.

The Address in Obstetrics by William B. Atkinson, M.D., Philadelphia.

Report of the Committee on the Regulation of the Practice of Medicine and Surgery. Chairman, Dr. R. L. Sibbet, Cumberland.

On Education of Deaf-Mutes. Chairman, Dr. L. Turnbull, Philadelphia.

On Care and Treatment of Insane Criminals. Chairman, Dr. John Curwen, Dauphin.

On Compulsory Vaccination. Chairman, Dr. Benjamin Lee, Philadelphia.

Secretaries of County Societies are requested to forward their lists of officers and members, with the post-office address of each member, to the undersigned, at their *earliest convenience*.

William B. Atkinson,
Permanent Secretary.

We have received a copy of the Constitution and By-Laws of the Alumni Association of the Albany Medical College, and have been requested to call attention to the following paragraph in an accompanying circular:

"Your attention is therefore asked to the subject, and a careful perusal requested of the Constitution and By-Laws—adopted by the Association—which accompany this circular. The Executive Committee desire that these may be placed in the hands of every graduate, and also propose making a complete catalogue of the Alumni. It is therefore necessary that their present residences be ascertained, and to this end all graduates are requested to send to the Secretary, *without delay*, their present addresses and also those of other graduates with whom they may be acquainted, especially of those in their immediate vicinity."

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM MARCH 24, 1874, TO MARCH 30, 1874, INCLUSIVE.

Peters, D. C., Surgeon.—Assigned to duty at Nashville, Tennessee. S. O. 43, Department of the South, March 21, 1874.

Webster, Warren, Surgeon.—Assigned to duty at Alcatraz Island, California. S. O. 29, Department of California, March 16, 1874.

Heizmann, C. L., Assistant-Surgeon.—Relieved from duty with Sioux Expedition, and to resume his duties as Post-Surgeon at Fort McPherson, Nebraska. S. O. 42, Department of the Platte, March 23, 1874.

* Williams has since gone to Molokai.